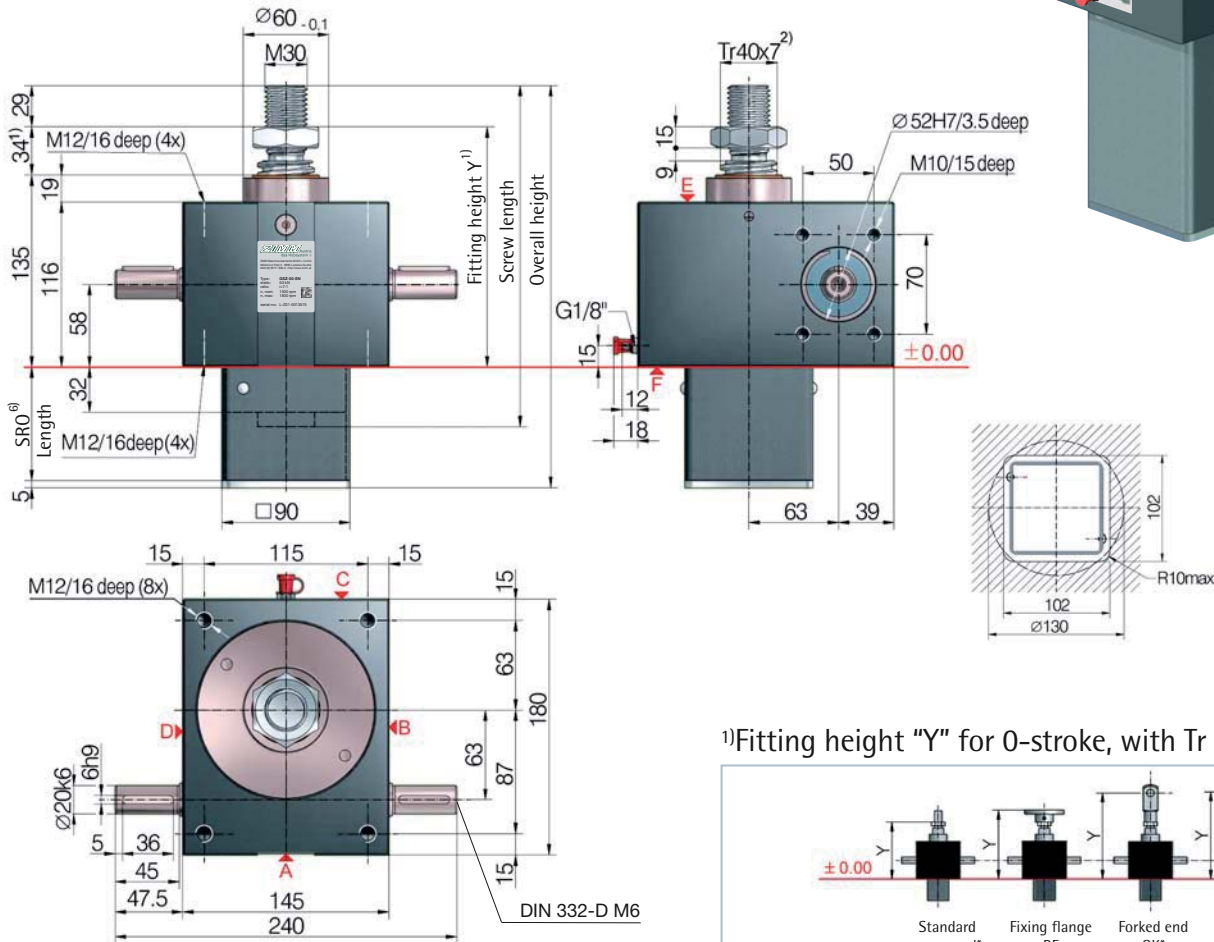


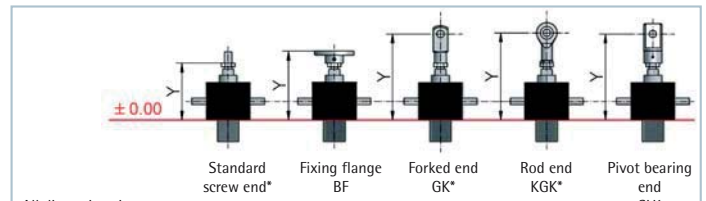
UNIQUE:
Screw lubrication
during operation

GSZ-50-S translating screw 50 kN



Opening for
protective tube SRO
square 102x102
or round Ø 130

¹⁾Fitting height "Y" for 0-stroke, with Tr 40x7 screw



All dimensions in mm

Bellocs FB	Y	Y	Y	Y	Y
without bellocs FB	169	199	289	279	261
Z-50-FB-390	264	248	384	374	310
Z-50-FB-600	251	235	371	361	297
Z-50-FB-1000	309	293	429	419	355
Z-50-FB-1200	304	288	424	414	350
Z-50-FB-1500	359	343	479	469	405

*with bellows fixing ring Z-50-FBR

⁶⁾Protective tube length SRO with Tr 40x7 screw

Without escape/ rotation protection	Escape/ rotation protection	Rotation protection, with limit switch set ES	Rotation protection with ES and KAR*
62+stroke	92+stroke	144+stroke	169+stroke

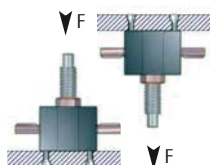
*Hinged bearing plate KAR, fitted on face F (below).

Standard ratios

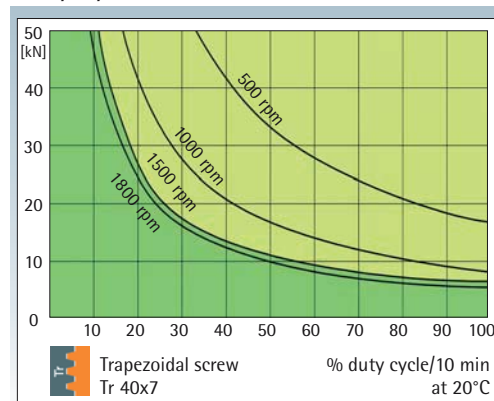
Type	Version	Speed	Standard screw ²⁾	i	Stroke per drive shaft rotation ⁵⁾
GSZ-50-SN	Translating	Normal	Tr 40x7	7:1	1.00 mm
GSZ-50-SL	screw	Low speed		28:1	0.25 mm
GSZ-50-RN	Rotating	Normal	Tr 40x7	7:1	1.00 mm
GSZ-50-RL	screw	Low speed		28:1	0.25 mm

Screw jack mounting

max. load: 50 kN compressive and tensile load
Screw: M12, strength class 8.8
Screw-in depth: 12 to 17 mm
Tightening torque: 38 Nm
Screw locking: with Loctite 243



Duty cycle thermal limit, for S+R



These curves are for guidance under standard industrial conditions (ambient temperature etc.) and correct maintenance (lubrication etc.). The max. input drive torques for optimum service life are at the right page - technical data (1500 rpm)

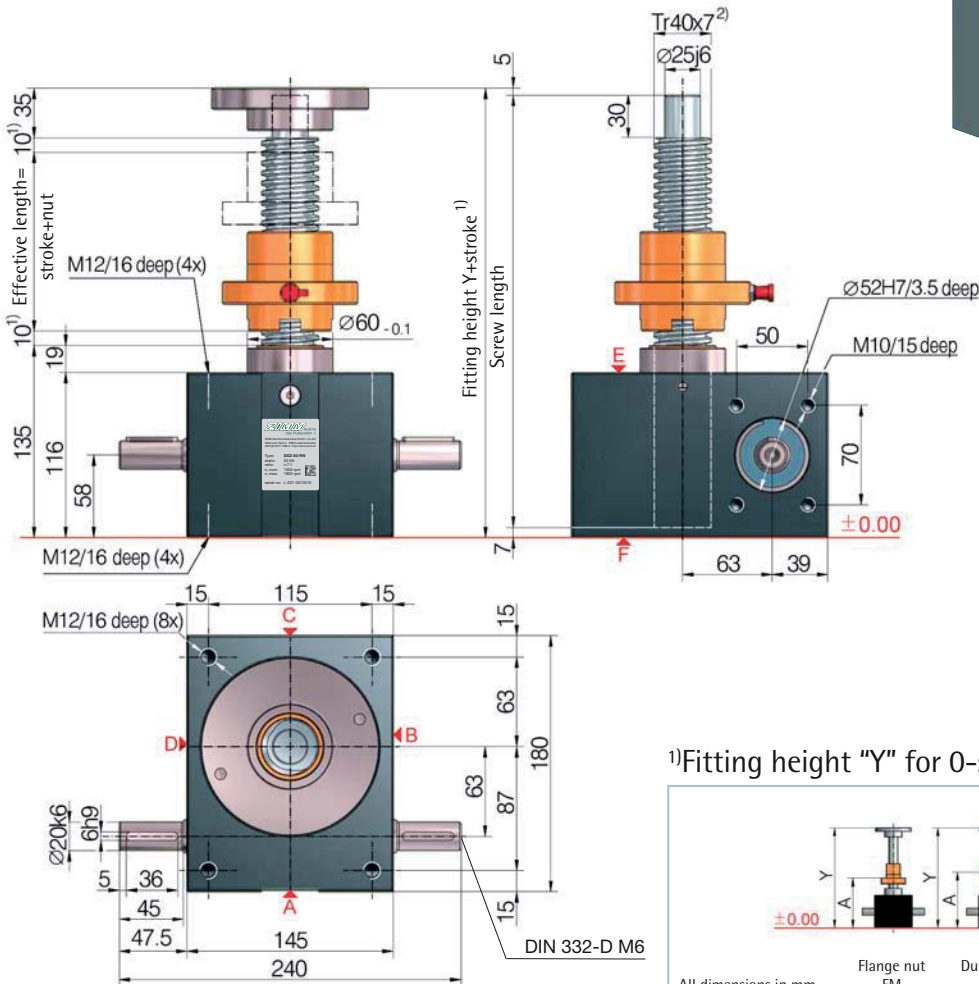
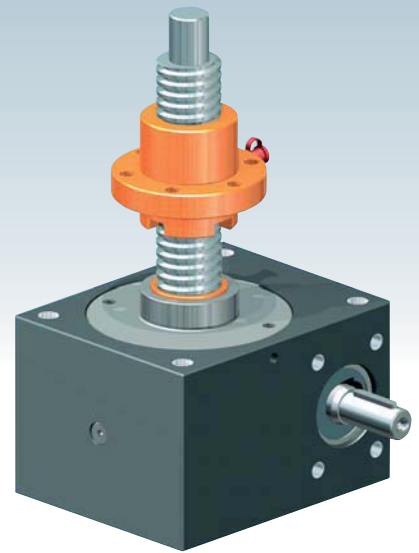
KGK:
% duty cycle
2 times to
4 times higher

Trapezoidal screw

Tr



GSZ-50-R rotating screw 50 kN



¹⁾Fitting height "Y" for 0-stroke, with Tr 40x7 screw

All dimensions in mm	Flange nut FM	Duplex nut DM	Duplex nut DM with SIFA	Self-aligning nut PM	Greasless nut FFDM
Bellocs FB	Y/A	Y/A	Y/A	Y/A	Y/A
without bellocs FB	256/161	260/179	323/242	319/244	275/195
2x Z-50-FB-390	-	403/252	462/311	462/317	420/270
2x Z-50-FB-600	-	377/239	436/298	436/304	394/257
2x Z-50-FB-1000	-	493/297	552/356	552/362	510/315
2x Z-50-FB-1200	-	483/292	542/351	542/357	500/310
2x Z-50-FB-1500	-	593/347	652/406	652/412	610/365

Detailed instructions for determining the length can be found in Section 8

50 kN

Technical data series GSZ-50-S / GSZ-50-R

max. compressive/tensile force, static	- 50 kN (5 t)
max. compressive/tensile force, dynamic	- see duty cycle curves
Nominal speed	- 1500 rpm
max. drive shaft speed	- 1800 rpm (depending on the load and duty cycle)
Screw size standard	- Tr 40x7 ²⁾
Gear ratio	- 7:1 (N) / 28:1 (L)
Housing material	- GGG-50, corrosion-resistant
Worm shaft	- steel, case-hardened, ground
Weight of screw jack body	- 15 kg
Weight of screw/m	- 8 kg
Gearbox lubrication	- synthetic fluid grease
Screw lubrication	- grease lubrication
Gearbox operating temperature	- max. 60°C, higher on request
Moment of inertia	- N: 6.40 kg cm ² / L: 2.53 kg cm ²
Input torque (at 1500 rpm)	- max. 31.5 Nm (N) / max. 10.4 Nm (L)
Drive-through torque	- max. 260 Nm

Drive torque M ₆ (Nm)	- F (kN) x 0.68 ³⁾ + M _L (N-normal) - F (kN) x 0.23 ³⁾ + M _L (L-low speed)
Breakaway torque	- Drive torque M ₆ x 1.5
Idling torque ⁴⁾ M _L (Nm)	- 0.76 (N-normal) / 0.54 (L-low speed)

Between gearbox and nut or nut and end of thread, provide for a safety distance of (minimum) 10 mm!

See Section 7 for the checklist.

Important information

- 1) - extension if a bellows or spiral spring is fitted: see the table or Section 8
- 2) - Tr 40x7 is standard, also available: double-pitch, stainless steel, left-handed, increased screw Tr 55x9 (only for the R version)
- 3) - factor includes efficiency, ratio and 30% safety
- 4) - at 20°C, can be higher when new
- 5) - for a 7 mm screw pitch